

Attorney Docket No.: **ISPH-0500**  
Inventors: **Yu et al.**  
Serial No.: **09/705,587**  
Filing Date: **November 3, 2000**  
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**I. Rejection of Claims Under 35 U.S.C. 112, First Paragraph**

In an Advisory Action dated May 22, 2002, the rejection of Claims 1-10 and 12 under 35 U.S.C. 112, first paragraph, as based on a disclosure that is not enabling, was maintained. The Examiner suggests that the claims lack critical or essential steps to practice the invention, including two wash steps, preparation of a sample prior to assay, and the possibility that the oligonucleotide of interest is not present in the sample. Applicants respectfully traverse this rejection.

With respect to the Examiner's comment that wash steps have been omitted and are critical to the performance of the present method, the claims specify that wash steps are included in the instant methods. Support for these amendments can be found throughout the specification, including Figure 2.

With respect to the lack of a sample preparation step, the claims specify that the sample of the instant methods are liquid samples. As taught in the specification at page 22, lines 7-21, the term "bodily fluid and/or extract" has been defined in the instant invention as a substance that is removed from the subject and, when not able to be readily assayed, must be prepared to form a liquid sample. As stated in the specification, such sample preparation is well known in the art. However, to be clear about

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the type of sample that is used in the instant method, the term "liquid sample" is now employed.

Finally, with respect to the comment that the claims as written do not provide that it is possible that the oligonucleotide of interest is not present in the sample, the Applicants respectfully submit that such an understanding is inherent to the present method. Like all such detection methods, if there is a final reading of "zero" or a level that does not exceed background, then one of skill understands that the entity being detected is not present in the sample being assayed. However, in an earnest effort to advance the prosecution, the claims specify that detection means finding a level of the oligonucleotide that is above the level found in a blank sample, a sample which contains no oligonucleotide.

Withdrawal of this rejection is, therefore, respectfully requested.

## **II. Rejection of Claims Under 35 U.S.C. 112, Second Paragraph**

In an Advisory Action dated May 22, 2002, the rejection of Claims 1-10 and 12 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention,

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was maintained. The Examiner suggests that the preamble states a method for detecting and quantitating while the final process step is only for detecting. Applicants have removed the term "quantitating" from the claims.

The Examiner suggests that claim 12 is of improper dependent form for failing to further limit the subject matter of the previous claim. Applicants have canceled claim 12, therefore this rejection with respect to claim 12 is moot.

The Examiner suggests that claims 1-10 and 12 are indefinite in recitation of "single-stranded and double-stranded oligonucleotide moieties are formed" as it is unclear what a double-stranded moiety is and then suggests that the term hybrid would be more appropriate. Applicants have written the claims to use the language suggested by the Examiner and removed the reference to "single-stranded and double-stranded moieties".

The Examiner suggests that claims 1-10 and 12 are directed to detecting an oligonucleotide, however, the claim appears to require the presence of an oligonucleotide and will not work when none is present. As discussed *supra*, the claims specify that the detection level must exceed the level of a blank sample.

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Claims 1-10 and 12 are suggested by the Examiner as being incomplete for omitting essential steps, specifically wash steps. Also as discussed *supra*, the claims include these steps.

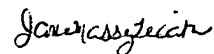
Finally, the Examiner suggests that claim 10 is indefinite because "single-strand specific nuclease" lacks proper antecedent basis. The term "oligonucleotide" is included in the claim in order to correct the antecedent basis.

Withdrawal of this rejection is, therefore, respectfully requested.

### **III. Conclusion**

Applicants believe that the foregoing preliminary amendment places this case in condition for allowance. Accordingly, favorable reconsideration and subsequent allowance of the pending claims is earnestly solicited.

Respectfully submitted,



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